Network-Centric Warfare ....It's Here

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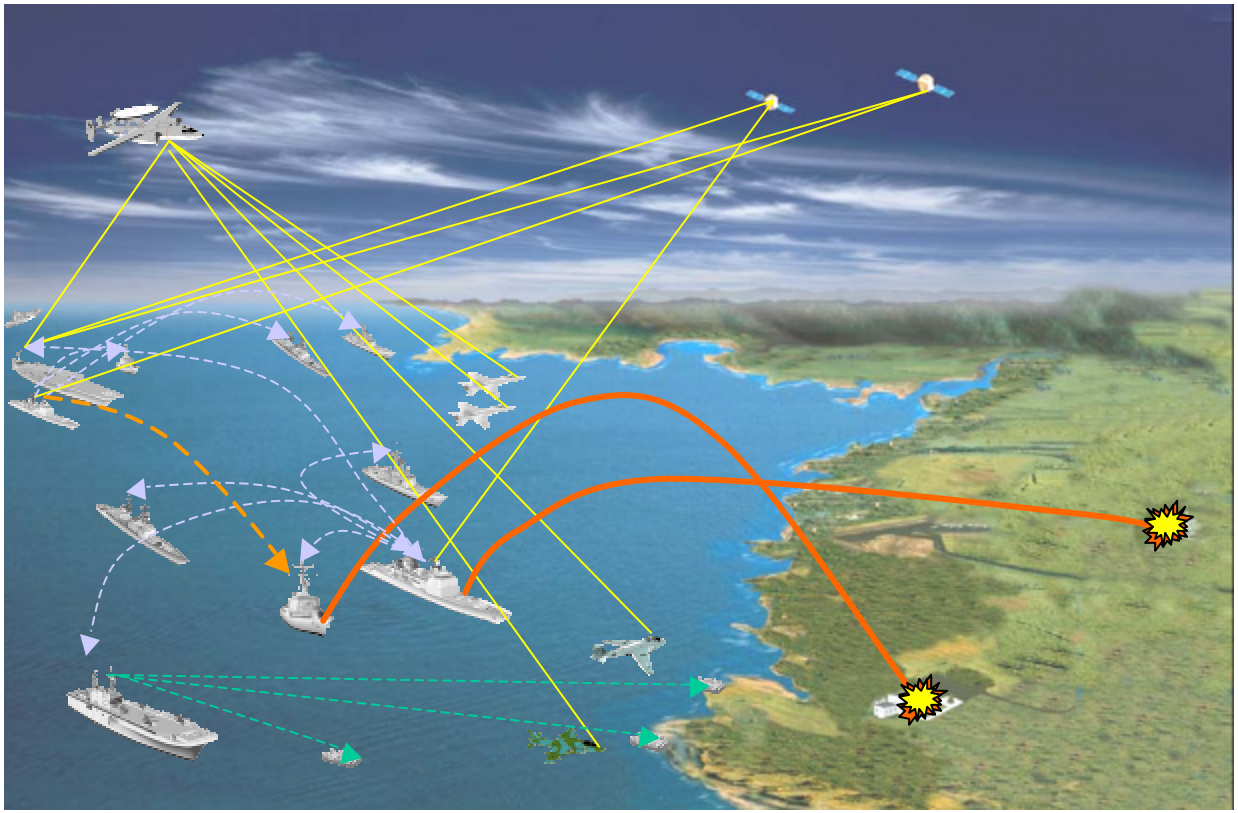
Naval Warfighting Today

- Networks integrate into warfare
- Dynamic
- Leverage platforms and weapon systems
- Protected networks

Command of the Seas · Crisis Response · Assured Access · Joint Transformation

Afloat Network-Centric Operations

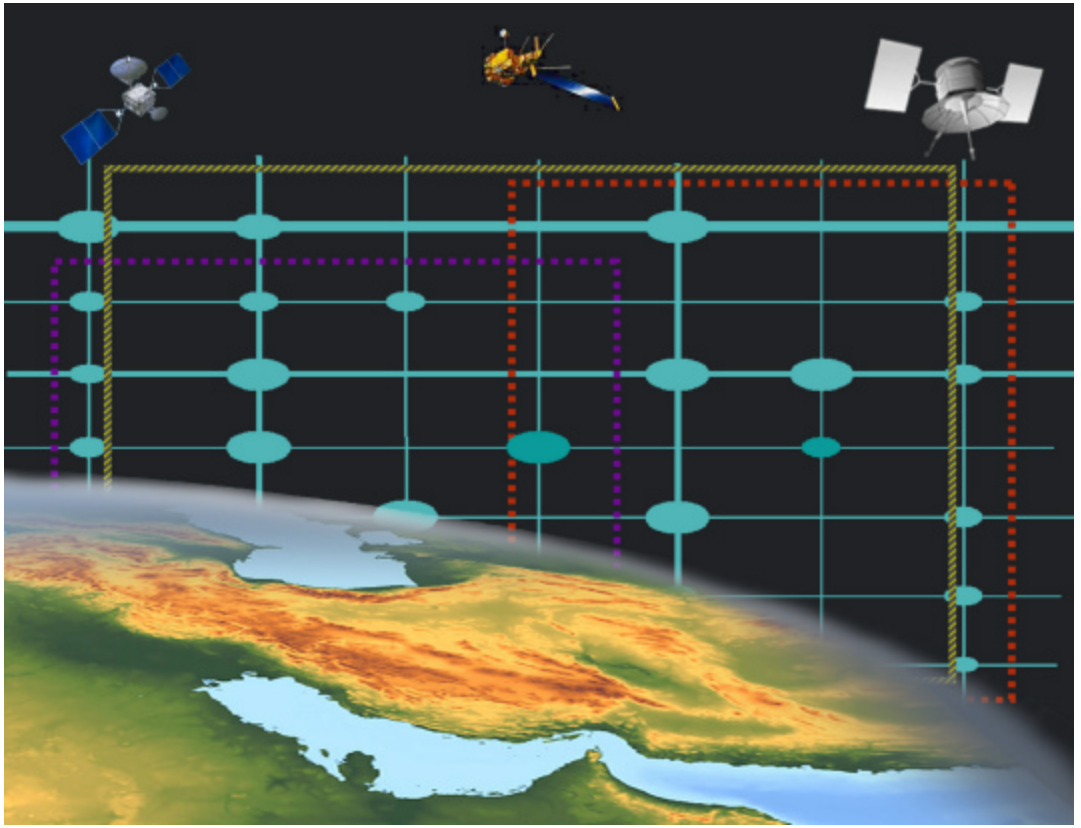


- IT21 in all Battle Groups/ Amphibious Ready Groups
- *"Collaboration at Sea"*
- Supports Naval mission capabilities
- Joint & Coalition interoperability

Navy will decisively engage and influence events ashore

Naval Space Operations

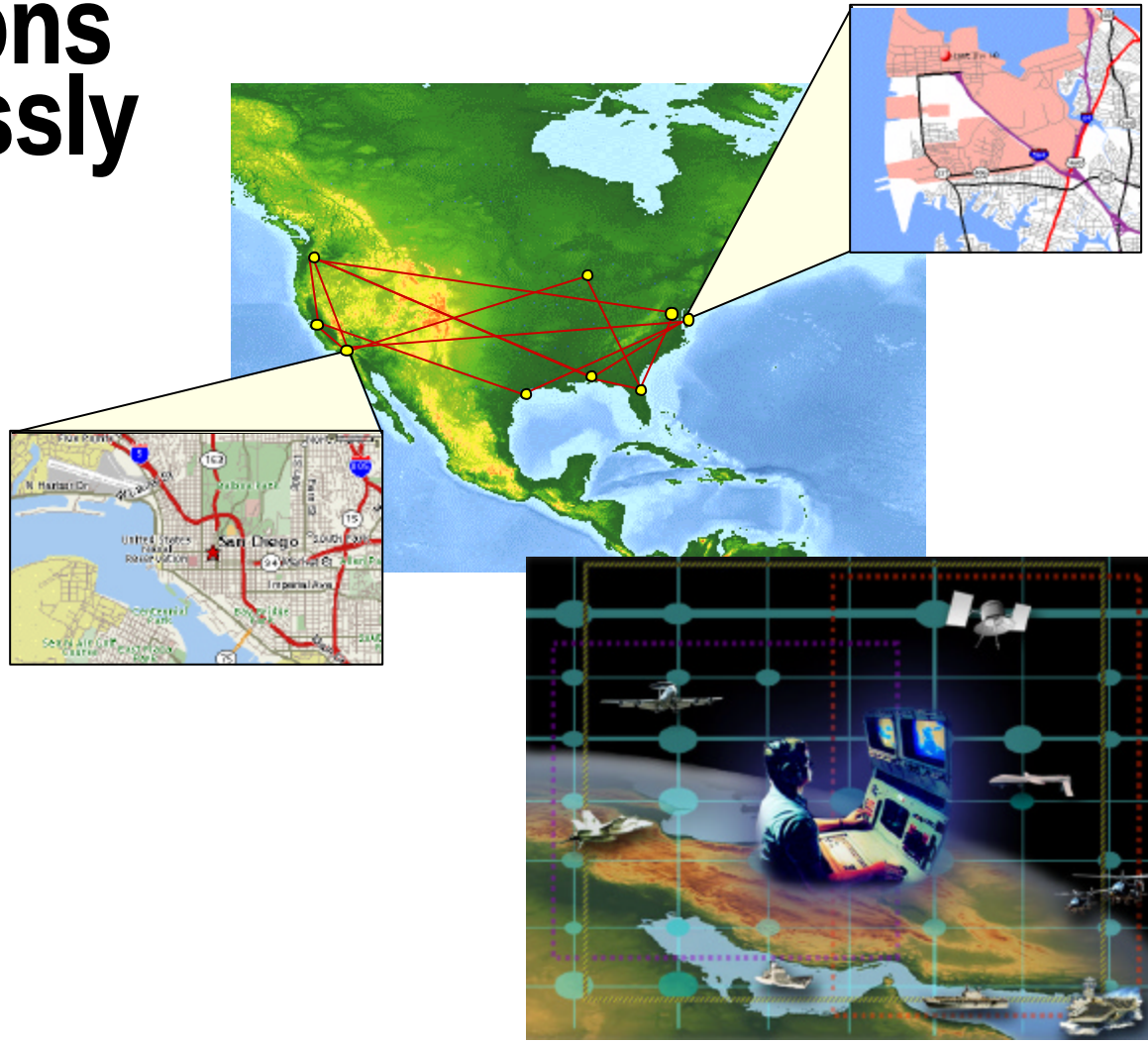
- Provides global access to information
  - High data rate communications
  - Direct downlink
  - METOC
  - Precise Positioning
- Space control - a growing mission



Navy is working hard to help DoD implement Space Commission recommendations

Networked Reachback

- Afloat operations linked seamlessly ashore
- Navy Marine Corps Intranet (NMCI)
- Web enabling
- Access commercial infrastructure



World Wide 24/7 Network Operations

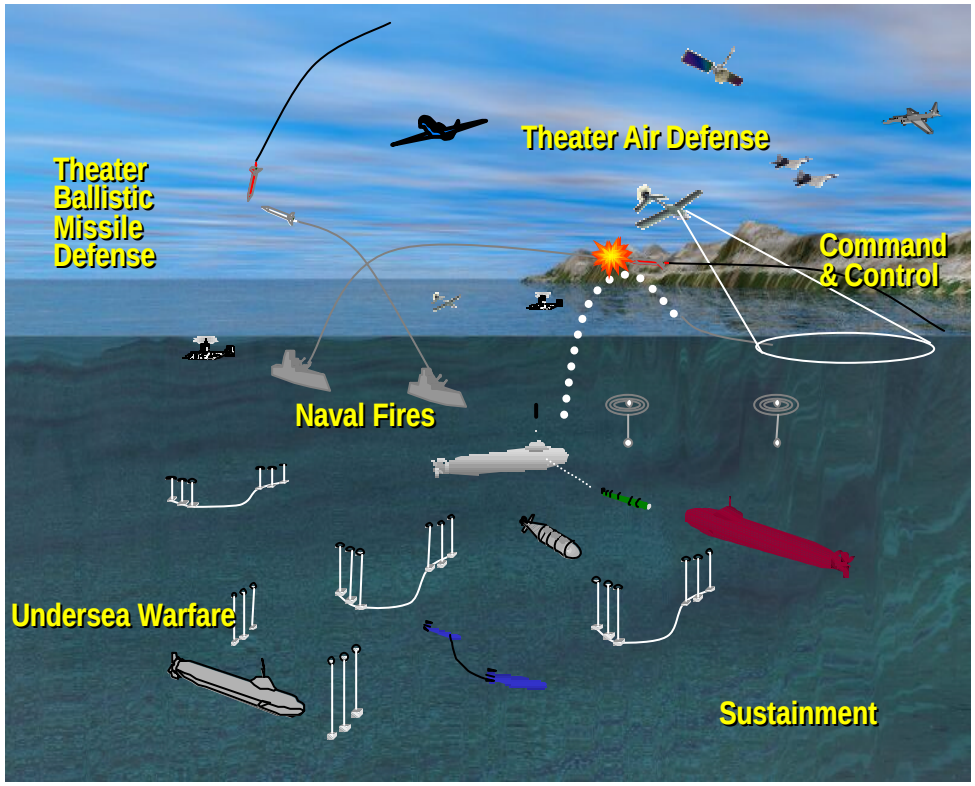
- Convergence of afloat and ashore – IT21 and NMCI
- Network Operations Centers – end-to-end management
  - Manage available bandwidth
  - Seamless joint interfaces
  - Dynamic electromagnetic spectrum management
  - Remote network support
- Information Assurance

Aligning for the Warfare Domain

- Information Operations integrated for the warfighter

- Information Professional community
- OPNAV N6/N7

The Network After Next

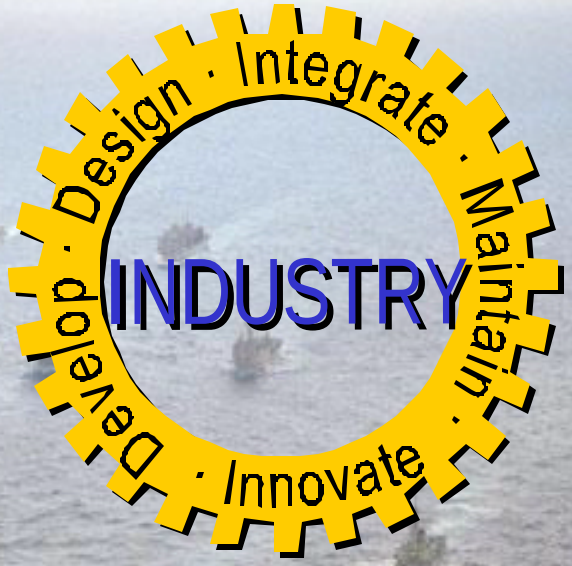


- **Multi-Tiered Sensor Field**
  - Scalable - space to seabed
  - National/Theater/Organic assets
- **Networks**
  - Fully-netted force
  - Processing and collaboration
  - Real-time shared knowledge
- **Enhanced Capabilities**
  - Shared battlefield awareness
  - Speed of decision making
  - Effects-based operations
  - Dispersed force protection
  - Mission flexibility
  - Global reachback
  - Sustainability

The Architecture for a Fully-Netted Maritime Force

How Can Industry Help?

- Security
- Wireless
- Networks
- C4 applications
- Business practices
- Others…



Summary

- We have built the foundation – IT21, NMCI, and the use of Space
- We have strategies to continue the transformation
  - Opportunities – a favorable environment
  - Challenges – technical, resources, cultural
- We are organizing for the future

Network-centric warfare enables naval forces to project power- at sea, in the littoral, and deep attack inland

The Power of the Network is Real